

III.—On a *Byssiferous Fossil Trigonía*.
By JOHN LYCETT, M.D.

THE discovery of a byssal aperture in a fossil *Trigonía*, in connexion with certain features which are presumed to have been physically connected with such a condition of existence, is a novelty in fossil zoology, and, as such, needs no apology, although the species was figured and partially described upwards of twenty-eight years since. I allude to *Trigonía carinata*, Agassiz, found in the Lower Greensand of various French and English localities. The well-known memoir by Agassiz on the genus *Trigonía* contains figures of this species representing merely immature casts, in which the ornamentation of the surface is only very imperfectly indicated; and the description also accords with such an unsatisfactory condition. D'Orbigny, in his 'Paléontologie Française,' has given elaborate figures of a single perfect specimen of adult or nearly adult growth. Upon referring to plate 286 of the work last cited, we find a marvellously perfect example of *T. carinata*, possessing all the usual sectional characters of the *costatæ*, remarkable more especially for the salient ornamentation of the area, with its large carinæ and intermediate *costellæ*: these features, so beautiful in the earlier stage of its growth, disappear altogether in specimens that have attained to about half the dimensions of adult shells, and are replaced by irregular, large, rugose, transverse plications; but in the figures of D'Orbigny we discover nothing of this: the area retains its pristine ornamentation unaltered to its ultimate stage of growth—a condition of existence which we may never expect to discover in any actual specimen. The same figures have no indication of a byssal aperture, and the *costæ* have less than their real obliquity. The author's text is only a brief description of the figures of the artist.

The general figure of *T. carinata* is remarkable as compared with examples of the genus generally; it is oblong or ovately oblong, much lengthened and narrow or inflated along its mesial portion, and has in fact much general resemblance to *Byssarca*. The byssal aperture is not large, and is placed at the anterior or antero-inferior border. An examination of the lines of growth shows that this orifice was formed only when the valves approached to their adult condition. Specimens which exhibit the complete or uninjured outline of the valves are all of immature growth, and had not formed the byssal aperture. Valves of adult growth are found in a condition altogether different and in accordance with the altered habits of the mollusk: the lively bivalve, with its salta-

tory motions, had then become sedentary, and lay moored to a rocky surface, or was partially buried in its sandy matrix; in such a position its upper or more exposed surface consisted of the postéal half of the area; and this portion, either exposed or discovered by the motion of the excurrent and incurrent siphons, invariably became a prey to the marine flesh-eaters: a portion more or less large is always found broken away and removed. The whole general aspect of the adult valves exhibits that worn or abraded condition with which we are also familiar in *Byssoarca*, and doubtless resulted from similar causes in both instances.

I hope to present faithfully executed figures of this byssiferous *Trigonia* in a Monograph on the British Trigonias, now in preparation for the Palæontographical Society.

IV.—*On the Coleoptera of St. Helena.*

By T. VERNON WOLLASTON, M.A., F.L.S.

[Concluded from vol. iv. p. 417.]

Fam. 19. Anthribidæ.

(Subfam. ARÆOCERIDES.

Linea transversa prothoracica basilaris, marginem ipsum basalem elevatum efficiens.)

Genus 35. ARÆOCERUS.

Schönherr, Curc. Disp. Meth. 40 [script. Aræcerus] (1826).

52. *Aræocerus fasciculatus**.

A. breviter ovalis, crassus, brunneo-piceus, pube brevi squamæformi demissa cinerea griseaque vestitus necnon in elytris plus minus obsoletissime (sc. in interstitiis alternis) longitudinaliter tessellatus; capite prothoraceque (subter pube) opacis, densissime et rugose punctatis, illo in medio tenuiter carinulato oculis maximis prominentibus, hoc subconico, postice lato bisinuato, costa transversa in marginem basalem cœunte necnon utrinque marginem lateralem (usque ad medium lateris ductum) efficiente, angulis posticis subrectis; elytris apice truncato-rotundatis, (subter pube) subopacis, densissime et rugose granulatis ac leviter crenulato-striatis; antennis pedibusque elongatis et (præcipue illis) gracilibus, illis rufo-testaceis clava obscuriore, his rufo-ferrugineis, tarsorum art^o 1^{mo} longissimo.

Long. corp. lin. 2—2½.

Curculio fasciculatus, De Geer, Ins. v. 276, t. 16. f. 2 (1775).

Anthribus coffeæ, Fab., Syst. Eleuth. ii. 411 (1801).

Two examples of an *Aræocerus*, which were taken at St. Helena by Mr. Melliss, I feel almost confident are referable to the *A. fasciculatus* (which is usually known in collections as the *coffeæ* of Fabricius), though I have thought it desirable to